

## SENATE—Thursday, September 13, 2001

The Senate met at 9:30 a.m. and was called to order by the Honorable DANIEL K. AKAKA, a Senator from the State of Hawaii.

### PRAYER

The Chaplain, Dr. Lloyd John Ogilvie, offered the following prayer:

Faithful Father, Your words to Joshua so long ago sound in our souls as Your encouragement to us today: "I will not leave you nor forsake you. Be strong and of good courage."—Joshua 1:5,6. Thank You for Your faithfulness. Your love and guidance are not an on-again, off-again thing. We can depend on You for a steady flow of strength. Just to know that You are with us in all the ups and downs of political life is a great source of confidence. We can dare to be strong in the convictions You have honed in our hearts and courageous in the application of them in our work in government.

Grant the Senators a renewed sense of how much You have invested in them and how much You desire to do through them in the onward movement of this Nation. It is for Your name's sake, Your glory, and Your vision that You bless them. Guide and inspire them as leaders now in this time of crisis in our Nation. Your word for the day is, "Be not afraid, I am with you!" Amen.

### PLEDGE OF ALLEGIANCE

The Honorable HARRY REID, a Senator from the State of Nevada, led the Pledge of Allegiance, as follows:

I pledge allegiance to the Flag of the United States of America and to the Republic for which it stands, one nation under God, indivisible, with liberty and justice for all.

### APPOINTMENT OF ACTING PRESIDENT PRO TEMPORE

The PRESIDING OFFICER. The clerk will please read a communication to the Senate from the President pro tempore (Mr. BYRD).

The legislative clerk read the following letter:

U.S. SENATE,  
PRESIDENT PRO TEMPORE,  
Washington, DC, September 13, 2001.

To the Senate:

Under the provisions of rule I, paragraph 3, of the Standing Rules of the Senate, I hereby appoint the Honorable DANIEL K. AKAKA, a Senator from the State of Hawaii, to perform the duties of the Chair.

ROBERT C. BYRD,  
President pro tempore.

Mr. AKAKA thereupon assumed the chair as Acting President pro tempore.

### RESERVATION OF LEADER TIME

The ACTING PRESIDENT pro tempore. Under the previous order, the leadership time is reserved.

### RECOGNITION OF THE ACTING MAJORITY LEADER

The ACTING PRESIDENT pro tempore. The Senator from Nevada.  
Mr. REID. I thank the Chair.

### SCHEDULE

Mr. REID. Mr. President, today the Senate will be in a period of morning business until approximately 11 a.m., with Senators, as the Chair has announced, permitted to speak up to 5 minutes each regarding S.J. Res. 22. Last night, there was a unanimous consent order entered that the following be the order of speakers today: BOND, LINCOLN, SMITH of New Hampshire, STABENOW, COLLINS, GRAHAM, MURKOWSKI, and BYRD. If there is not one of the Senators here on time, it will go back to the other side.

At 11 a.m. or thereabouts, the Senate will resume consideration of Commerce-State-Justice Appropriations Act, and it is every hope that with the two leaders we can complete action on that CSJ Appropriations Act early today.

There likely will be rollcall votes throughout the day's session. We may be in recess from 12:30 p.m. until 2:15 p.m. today. We are awaiting further word from Senator DASCHLE on that matter.

### MORNING BUSINESS

The ACTING PRESIDENT pro tempore. Under the previous order, there will now be a period for the transaction of morning business for not to extend beyond the hour of 11 a.m., with Senators permitted to speak with respect to S.J. Res. 22 for up to 5 minutes each.

Under the previous order, the Senator from Missouri, Mr. BOND, is recognized to speak for up to 5 minutes.

### TERRORIST ATTACKS AGAINST THE UNITED STATES

Mr. BOND. Mr. President, September 11, 2001, will forever be burned into American history as a day of horror without precedent.

Our hearts and prayers are with survivors and families of those who were murdered in New York City, the Pentagon, and in the hijacked airplanes.

Although still appalled by the damage, the United States is in the process of recovering from these attacks.

Fate has written many painful chapters in America's history. Each is sharply engraved into our collective memory. Most are battles and wars: Gettysburg, Pearl Harbor, Iwo Jima, Pork Chop Hill. Others were acts of madmen such as the bombing of the Oklahoma City Federal building and the slaying of our Presidents Lincoln, McKinley, and John F. Kennedy.

The magnitude of Tuesday's attack defies understanding. It is the scale of what happened that day that freezes the mind in horror. The wrenching sights of passenger planes deliberately flown into the largest symbol of America's economic and military strength was an assault on how we think of ourselves, our Nation and our role in the world and in history.

Vehicles of peaceful domestic travel were bent horrifically into missiles of death shot into the heart of our economy—into all of our hearts. The blasts we watched in real-time and in slow-motion reruns in our collective mind's eye have buried splinters deep into our souls.

As shock gives way to action, recovery and the identification of those responsible, we must remember this is not the first time the American people have been tested. History has probed the limits of our strength and patience many times, over many generations of Americans.

As the realization of what has happened continues to sink into our national consciousness, we must never forget that each time our Nation is tested, each time we have survived—as we will again.

And while it seems impossible to believe today, barely days after this horrific attack upon our soil, we must draw strength from the knowledge that each test has failed to diminish our Nation. Just the opposite. America's history is written by a people who rise to every challenge, and history has shown we will prevail.

We are the greatest and most powerful nation today precisely because we have met and triumphed over adversity. This is our national identity. This is what it means to be an American. This is the strength of character that built this Nation over the last four centuries.

Americans do not face challenges. We surmount them. And we grow stronger as a result.

I am confident that we are already seeing this in the days after the disaster. We see it in the faces of the New York firemen and police officers, the dedicated men and women who fought to protect and recover and who have

often lost their lives in that effort. A grim determination and smoldering pride etched in the ashes on their faces—etched with sweat. And tears. And blood. We see it in the faces of our military men and women still breathing life into our Nation's military command center at the Pentagon.

We see it in the commitment of the urban search and rescue teams and other public safety officers who have gone into New York City and into the Pentagon to help. I am deeply honored and proud that my good friends in the Missouri Task Force One, from the Columbia, MO, area, are there helping, and they want to help. Americans want to help. While the terrorists hit their targets, caused death and damage, their real aim of terrorism is to strike a crippling psychological blow. The terrorists will succeed only if we surrender our confidence in our Nation. Americans cannot and will not allow them this victory.

Many people have asked me, what can we do? I hear that from Missourians all the time. First, obviously, is prayer, for those who have been lost, for those who suffer, for the families and loved ones. I ask also for prayers for individuals, for families, for guidance, that they may be strong, that this country may be strong, that we may not be disabled by the threats of terrorism.

We must continue to be strong as Americans. There are things we can do. Giving blood is one thing that is readily available. I ask all my constituents to listen to their radios and televisions and contact the local blood donor stations.

I ask citizens not to panic. We have seen panic in the buying of gasoline with 30-car-long lines. Do not hoard. Prices are going way up; do not buy. Do not raise prices. Do not price gouge.

This country will be strong. We will have our economy back on track if we behave rationally and responsibly. Let us not be crippled by potential terrorism. Let us not put up barriers that are impossible to overcome.

I have talked with people in the airline industry. Our airline industry is suffering billions of dollars of losses. We must have a better airline security system. But let us be smart about it. Let us not make it impossible to travel by airplane.

We are beginning the process of taking down the extraordinary security items around this Capitol. This is the people's place of business. We want people to be able to visit. Normally on Thursday mornings I have an open house for Missourians. They could not get here. I had a tough enough time getting here myself. We are going to go back to business in this Capitol. We need to go back to business as Americans. We need to build the strength in our families. That will strengthen our country.

I hope those considering scheduling sporting events will realize this is part of our national culture. These should go forward. I ask we not be so terrorized by the terrorists that we forget what we do in this country and why we are strong.

I believe the President has indicated the war against terrorism will be conducted with great vigor, with no terrorist, and no nation harboring them, safe. The President's hands ought not to be tied. So we can ensure our Nation is never dealt a similar blow, we must give the President the authority, support him and give him the resources and provide him the freedom to act, to preempt the acts of terrorism.

Tuesday's attacks have shaken us. But the bedrock beliefs and principles of the United States remain strong. We will show the terrorists.

Our immediate focus must be to recover from these attacks. And to tend to the victims and their families. We may not know the full toll for many weeks.

In the longer run, we must recognize that these attacks demand an appropriate response from the United States.

I know the man who is the President of the United States. I know this man. And I am confident that he will throw the full weight of the U.S. Government behind the task of identifying and destroying those responsible for the attacks. The President should also have the power to take appropriate steps to prevent a reoccurrence. And I know that he has the support of both political parties in the U.S. Congress. And more importantly, he has the full support of the American people.

Our Nation must not rest until those behind the attacks are destroyed. Our unyielding anger will span the world and reach the terrorists wherever they may try to hide. The world is not big enough to offer them the concealment they seek. We will find them, we will get them, and we will make them pay for what happened Tuesday.

Any nation that seeks to provide protection or cover for the terrorists ought to think twice before doing so. The President is correct to make no distinction between the terrorists and those nations that shelter them. The price of doing so will be very high.

Let us be clear about what Tuesday's attack was—and what it was not. It was an act of war, not a simple criminal act. I say it was not merely a criminal act because of its scale. It was too large to be only a criminal act. It was an act of war against our people, our way of life, and against all people who cherish democracy and freedom.

I believe there has been an unfortunate trend in the American Government in recent years to "criminalize" acts that are by definition acts of war against this country. That trend has delayed our potential responses until the evidence collected approached the

standards required by a court of law. I believe that to have been a mistake.

The war against terrorism—and its war against us—is just that, war. And we ought to be free to respond in kind. Not only after that fact, but I believe the President's hands ought not to be tied. To ensure our Nation is never dealt a similar blow, we must give the President the authority and freedom to act to preempt such acts. That is he must be able to strike terrorists before they strike.

For many years the prevailing trend has been to shackle our intelligence agencies—to err on the side of doing too little rather than doing too much. I understand the forceful reasons behind this trend. Nothing is more dear to us than the protection of our civil liberties. Our political culture at root is defined by our steadfast guardianship of our civil liberties.

I believe we can do more to attack terrorism without further encroaching upon our civil liberties. I believe we can strengthen the reach of our intelligence agencies significantly at no risk to our civil liberties.

We know the incalculable cost of getting this balance wrong. In our understandable zeal to protect our civil liberties, we hampered the very agencies that protect not only our lives but our very way of life.

America is a different nation today than it was Tuesday morning. We have been attacked in a way without precedent, in kind and magnitude. Our Nation needs time to grieve, we need time to tend to our dead and to care for the wounded and their families.

Tuesday's attacks have shaken us. Yet the bedrock beliefs and principles that anchor the United States remain strong. Just how strong is something the terrorists will soon discover.

God bless the United States of America.

The ACTING PRESIDING pro tempore. Under the previous order, the Senator from New Hampshire, Mr. SMITH, is recognized to speak for up to 5 minutes.

Mr. SMITH of New Hampshire. Mr. President, this is a very sad time for America. The unthinkable has happened. What we always feared could happen, but prayed never would happen, has happened.

I rise today to pay tribute to the men and women who lost their lives in this cowardly attack against the United States of America.

I, as so many others, am overcome by the magnitude of this horrific act, a cowardly act against innocent people. It is hard to understand what would motivate people to do such a thing. But now I think we understand our hearts must go out to the victims, to their families, and all who have suffered at the hands of this evil that struck this greatest nation on Earth.

May God be with those who have passed and those who are suffering.

Words, I know, are of little solace in a terrible tragedy such as this in dealing with the shock and pain. I know words may ring hollow compared to the pain and disbelief that the families must be feeling. I want those families to know we are as one nation under God. We are united in our resolve, no matter who we are, to see justice done on behalf of the lives lost so senselessly.

We must unite and comfort our fellow Americans in these difficult days. Their grief is immeasurable and they need our support. They will have it.

My State lost many citizens in this tragedy, including Thomas McGuinness of Portsmouth who was the copilot of American Airlines Flight 11. I knew Tom personally. He was a fine man. His family and the families of all those who have lost loved ones are devastated by this tragedy. They need our prayers.

I commend the efforts also of the brave men and women who are working around the clock, risking their own lives to rescue those still trapped in both the Pentagon and at the World Trade Center. We stand behind them and pray for their success. As each hour goes by, we hope to see another survivor and another family member united.

I also commend President Bush and Senators DASCHLE and LOTT and the leadership in the House for returning to this city and getting back to business, letting these people know we will not tolerate this interruption in our system, and demonstrating we will not be cowed by the actions of these despicable people.

The American people understand an act of war was committed against the United States of America. Make no mistake about it, it was an act of war. You can say it is the Pearl Harbor of the new millennium, but it is far worse than Pearl Harbor. I might add, we responded to Pearl Harbor and we will respond to this. Make no mistake, the United States of America will respond to this heinous act with overwhelming force. We will find those responsible and those who supported these evil acts. They will be eradicated. This is not a question of bringing criminals to justice. This is an act of war, and it will be responded to as an act of war.

After we win—and win we will—we do have some serious questions we will have to answer. What went wrong? Why didn't we have the intelligence assets we needed? How can we protect ourselves in the future without giving up the civil liberties we cherish so much? Where are our priorities? These are all important questions which need serious attention and honest answers.

We must never forget the magnitude of this loss and its effect on our way of life. September 11, 2001, will always be with us. Like December 7, 1941, we will always remember where we were. In the past, we have not decisively acted

against some of these terrorist attacks and threats. This will not stand any longer.

Some talk about multilateral efforts to combat terrorism; that is fine. I am here today to say to the American people we will act unilaterally, if necessary, to protect our people. We need to send a clear message to terrorists and those countries that harbor them that there is no distinction, as the President has said, between the terrorists and the country that harbors them; we will decisively act against this cowardly aggression, and they will pay the full price for what they did.

As our President said, America will hunt down and punish those responsible. President Bush will have my support and the support of every American to do just that. We must be on the offensive against terrorists and those states and individuals who support them. The policies of the past must change. We are at war, and this is a war that we will win.

God bless America.

The ACTING PRESIDENT pro tempore. Under the previous order, the Senator from Arkansas is recognized to speak for up to 5 minutes.

Mrs. LINCOLN. Mr. President, on Tuesday a series of terrorist attacks on the United States shook our Nation and left thousands suffering or dead. Almost all of us in this Chamber have risen to express our compassion. Almost everything has been said. But with such a tragic event, each one of us feels compelled to tell our own story.

I rise today to offer my continued prayers and condolences to the victims and their families. And I rise to add my voice to those condemning the atrocities committed against the United States of America Tuesday morning, September 11, 2001.

The four hijackings, and the deliberate terrorist attacks on the World Trade Center and the Pentagon, are an outrage against our nation and against human decency. I support the President in his pledge to devote all of our country's resources to the task of determining who is responsible for these acts and of holding them accountable.

In the days to come, we will need to reflect on Tuesday's events to determine what we will take from them and how we will respond.

To begin with, it appears certain that these attacks will force us to re-define our national defense priorities. According to many reports, the hijackers of the airplanes were armed only with knives and boxcutters. This disturbing detail underscores the reality that the greatest threats against our national security and our well-being may no longer be missiles or tanks or armies. The greatest threat is terrorists or rogue nations armed with simple weapons and a dangerous resolve.

It is time that we demonstrate the same resolve in preventing and, when

necessary—as now—responding to acts of terror. We need to reconsider how our security apparatus, our intelligence network, and our channels of diplomacy can be strengthened and more effectively employed to ensure that these attacks are never duplicated. Let us begin a new dialogue about our national security that accounts for this changed and changing reality. Let us devote all our resolve to tracking down and destroying these agents of terror.

We need to recognize also that Tuesday's events must, by necessity, call us out of our complacency. For too many years, our national character has too often been focused inward.

Tuesday's tragedy should remind us of our duty to not only our families and our immediate circles, but of our duty to our neighbors, our communities, and our nation.

Still, the reports that we have heard suggest that these terrible attacks have brought out much of the best in the American character—the courage of the search and rescue team members, the commitment of our law enforcement officers, the generosity of those who have given their support to these efforts, and the sympathy and caring that all Americans have extended to the suffering.

I am deeply disturbed, however, by some other reports that are coming to light. Arkansas newspapers reported Wednesday morning that rumors of oil shortages have forced a run on gas stations in the American heartland, and that some station owners have raised prices to exploit this fear. I am pleased that the Attorney General of Arkansas, Mark Pryor, has pledged to investigate the actions of these profiteers. Those who attempt to profit from these events should know that their actions will not be tolerated and that, if necessary, they will face prosecution for their actions. I ask my colleagues to join me in denouncing this sort of profiteering from tragedy.

Foremost in my mind is the human dimension of Tuesday's events. It will likely be several days before we have a clear sense of how many lives were lost, but there is no doubt that the total will be in the thousands. Numbers of this magnitude will ensure that the effects of these horrific acts will be felt by all Americans.

We now know that Sara Low, a native of Batesville, AK, and a flight attendant on American Airlines Flight 11, was killed when her plane struck the World Trade Center. Sara was a 1991 graduate of Batesville High School and a graduate of the University of Arkansas. Our deepest sympathy and our prayers are with her parents, Mike and Bobbie Low, and her family and friends as they grapple with this horrible tragedy.

It is a horrible and saddening reminder of how the shock waves of these

events are felt throughout our nation, far beyond New York and Washington. As a daughter, as a wife, as a mother and as an American, I am deeply pained by our suffering today.

It has now been over 48 hours since the first plane struck the World Trade Center, and even now it is possible that there are scores of people trapped in the debris and rubble in New York and in Virginia. Our prayers are with them and their families, and it is my great hope that, if there are survivors, they are rescued soon and reunited with their loved ones.

We also extend our prayers and sympathy to the families of those who were killed in Pennsylvania, where United Airlines Flight 93 was forced into a crash landing.

Tuesday morning, these terrorists made their statement, at a great and unprecedented cost of American lives. Let our statement to them be that this was an act of war, and from this point forward, the United States of America is at war against these kinds of actions.

Let them know that although they may strike at the United States, they cannot strike at the freedom and resolve that make our nation great.

I join my colleagues in letting these terrorists and anyone else who would take such actions against this great Nation know, it will not be tolerated.

I yield the floor.

The ACTING PRESIDENT pro tempore. The Senator from Arkansas yields the floor.

The Senator from Alaska, Mr. MURKOWSKI, is recognized to speak for up to 5 minutes.

Mr. MURKOWSKI. Mr. President, I join my colleagues and all Americans—those from my State of Alaska and throughout the world—in prayer, prayer for those who tragically lost their lives last Tuesday and for those who are even now fighting for their lives in the rubble associated with the tragedy in New York and possibly still at the Pentagon.

The inhumanity of this act will live in infamy. We yearn in heartfelt sorrow for the families of those injured, those lost. We all join together in support of our President and to assert our resolve to endure the evil wrought Tuesday, to ensure that evil is countered, and that that evil is destroyed.

The hunt for those responsible has begun. The terror they have sought to inspire will not stand. So let's be very clear, recognizing the great and enduring virtues of our Nation: our liberty, our tolerance, our fairness. These are the very values which the terrorists trampled upon in pursuit of their misguided quest. These will not save those responsible for these crimes. We recognize our own values are sacrosanct, but our resolve to protect those values is absolutely unshaken. We should not, as we follow the tracks of the killers to

the lairs of their leaders, presume to know their identity with certainty. Neither can we begin to know their motivations for committing the most criminal of acts—killing innocent people.

If the killers believed that they, through this act, would enter the Kingdom of Heaven, they now realize the real destination to which Satan has guided them.

But to the children of America I say: Have faith; your parents, your teachers, your Government are all working hard to protect you, to protect you from this horror. Your responsibility is to grow, to learn, to play—and many adults are working to bring those responsible to justice, to ensure that they and those who helped them never commit this kind of a crime again.

To the terrorists who have sought to bring fear and chaos to the United States, I say to you: You have failed. It is you who should be afraid, afraid of the sense of justice of the American people, afraid of your fate at the hand of God, afraid of what you have unleashed.

As we shared, along with Members of the House, on the steps the other evening "God Bless America," let me also mention the dimension of this which we all relate to in our own lives.

I stand here as one who recalls as a child the "Day of Infamy," December 7, 1941. I noticed a piece that indicated the deaths from that surprise attack on Pearl Harbor. It was 2,403. Clearly, this tragic set of circumstances brings the death toll to many times that amount.

We have the realization for the first time that an aircraft has been used as a weapon by terrorists. How do we protect the public? What change is it going to make in transportation? It has shaken some of the foundations and symbols of our Nation—our buildings—which represent prosperity in our economy. It has not shaken the resolve to recover nor the resolve to pursue those responsible. We are prepared to move heaven and Earth to bring to justice those who are responsible for this carnage.

But everything did change Tuesday. Things will be different in this country. We still do not know the extent of the threat, although we do know that we all must be vigilant.

I join with my colleagues in an expression of faith and an expression of hope and an expression of conviction that America will overcome this tragedy. America will never forget this tragedy.

I yield the floor.

The PRESIDING OFFICER (Mrs. LINCOLN). Under the previous order, the Senator from Florida is recognized to speak for up to 5 minutes.

Mr. GRAHAM. Thank you, Madam President. I wish to commend you and Senator SMITH for the eloquent re-

marks you have just delivered to the American people.

We all are shocked by what occurred on September 11, and we recognize that this will be a demarcation date in the history of America. It will be a date upon which we will recognize our loss of innocence and the new reality of our vulnerability. Not since the Civil War has there been a conflict of such violence committed on the territory of the United States as we experienced on Tuesday.

As with Pearl Harbor and the assassination of President John Kennedy, all Americans will forever remember where they were and what was in their mind as they heard of the tragic events of last Tuesday. Today our prayers are with the victims in New York and here in the Pentagon and with their families.

Our admiration and good wishes go to the brave firefighters, policemen, doctors, nurses, and all the other emergency personnel who are working so hard to find the survivors and to deal with the pain. We pray for our Nation as well. We have entered a new phase in history, one that will unfortunately be marked by a pervasive sense of insecurity.

I am fortunate to be a grandfather of 10 beautiful boys and girls. Their mothers called me Tuesday evening to tell me how frightened the grandchildren were and that they were wondering whether their neighborhood, whether their school, and whether their own brothers, sisters, mothers, fathers, and friends would be subject to the same thing they had just seen on television.

Every time we take a trip, particularly by airline, we are likely to be reminded of Tuesday's incident. We will also face increased security, particularly at airports and seaports. Our border checkpoints will be reinforced. But all of these are necessary changes. Frankly, I believe the vast majority of Americans will agree that there will be reasonable, new restrictions in light of the new period of American history in which we will now be living.

To honor the lives of the victims, we must take steps to assure that other Americans will not be subject to the same fate. A first step in that honoring will be to support the President of the United States of America. He will have some extremely difficult decisions to make in the next few days.

Clearly, we are not going to allow this horrific act to go unanswered. As has been the case in so many other incidents of conflict, we will enter this commitment to see that those who have committed these deeds will be brought to justice with great enthusiasm. The real test will be whether we are prepared to make the long march that is likely to be required in order to root out the many cells of terrorists around the world that represent a continuing threat to our security. The

President will need our support then even more than now.

We also need to rebuild some of our institutions that will be on the front lines of our efforts to assure the security of America. One of those with which I feel a particular responsibility is our national intelligence capability. To deal with terrorism, there is no alternative but to have the most effective capacities to anticipate what the motivations and capabilities of our particular adversaries are and then to be able to interdict those capabilities before they can be put into action.

We have seen over the past several years a degradation in some important areas of our intelligence capabilities. We will know in the next few weeks whether those shortfalls bear a part of the responsibility for what happened on Tuesday.

Illustrative of the areas in which we are going to need to pay renewed attention and additional new resources will be rebuilding our human intelligence. For a long period during the cold war we became increasingly dependent upon technology as the means of gathering information. That played a critical role. But in this new era there is going to be no substitute for having well-trained, diverse in background and language skills, and technologically competent persons who can represent the interests of the United States in getting inside these organizations so that we will have a level of understanding that will allow us to prepare for and to avoid incidents such as Tuesday's tragedy.

We also must make some investments in some of our technological areas, particularly the National Security Agency, which for many years had been our prime means of gathering information by essentially eavesdropping on our adversaries. That capability, which was developed to a very high level during the cold war when most of those communications were over the air, has been degraded as countries, including our own, have gone to other forms of communication. As an example, communicating computer to computer does not allow the kind of detection we have relied on in the past. It is going to be important that we make a new commitment and a new investment to build up that capability to what it has been historically.

With the permission of the body, I am submitting for the CONGRESSIONAL RECORD a recent article which appeared in the Washington Post which examines the National Security Agency, some of its immediate challenges, and the pathway to a stronger and more secure future that is being developed under the direction of its leader, LTG Michael V. Hayden. I ask unanimous consent that be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From the Washington Post Magazine, July 29, 2001]

#### TEST OF STRENGTH

*For two years, Air Force general Michael Hayden has waged a secret struggle to overhaul the world's most powerful spy agency. Nothing's riding on his success but the future of America's national security*

(By Vernon Loeb)

The call came after dinner on a Monday night, as the general was watching the TV news at home. There was a computer problem back at the agency. A software failure had knocked out the network.

"Give me a sense," the general commanded the duty officer over the secure phone line. "What are we talking about?"

"The whole system is down," the duty officer said. A result of overloading. Plus, the network had become so tangled that no one really seemed to know how it worked. There was no wiring diagram anyone could consult. It was January 24, 2000. Lt. Gen. Michael V. Hayden was still new on the job—just finishing his 10th month as director of the National Security Agency—but he did not need a duty officer to explain the implications of his computer problem. The agency's constellation of spy satellites and its giant listening stations on five continents were still vacuuming communications out of the ether. Their vast electronic "take"—intercepted telephone calls, e-mails, faxes and radio signals—still poured into memory buffers capable of storing 5 trillion pages of data at agency headquarters at Fort Meade. But once in house, the data froze. Nobody could access it, nobody could analyze it.

The NSA—the largest and most powerful spy agency in the world—was brain-dead.

Hayden called George J. Tenet on a secure phone and broke the news to the director of central intelligence. The nation's two top spymasters knew there was nothing they could do but get out of the way and let the technicians try to figure out what was wrong. The keepers of the nation's secrets now had another one to keep—a secret Saddam Hussein or Osama bin Laden or some other enemy of the state could have surely used to great advantage.

The next morning, the only consolation Hayden had was the snow: A blizzard had blasted Washington and shut down the federal government, giving his gathering army of computer engineers and techies some time—without the workforce around—to bring the agency out of its coma. Hayden's despair deepened as two full days passed without progress. The mathematicians and linguists reported back for duty Thursday morning, only to find a handwritten message taped to doors and computer terminals: "Our network is experiencing intermittent difficulties. Consult your supervisor before you log on."

The crash had now become a security crisis. By noon, at a hastily called "town meeting," Hayden walked onto the stage of the agency's Friedman Auditorium and told thousands of employees—in person and on closed-circuit television—what had happened.

"We are the keeper of the nation's secrets," he said at the end of his grim presentation. "If word of this gets out, we significantly increase the likelihood that Americans will get hurt. Those who would intend our nation and our citizens harm will be emboldened. So this is not the back half of a sentence tonight that begins, 'Honey, you won't believe what happened to me at work.' This is secret. It does not leave the building."

Could all 30,000 employees live by the code of secrecy they'd grown up with?

To Hayden, a career intelligence officer who had served in the first Bush White House and had run the Air Force's cyberwar center, the computer crash seemed the perfect metaphor for an agency desperately in need of new technology. But the reality, he would quickly see, was actually worse. Antiquated computers were the least of the NSA's problems.

By virtue of its magnitude and complexity, the NSA invites superlatives and outside comparisons. Its collections systems scoop up enough data every three hours to fill the Library of Congress. It employs the world's largest collection of linguists and mathematicians and owns the world's largest array of supercomputers. To power the supercomputers, it uses as much electricity as the city of Annapolis. To cool them, it maintains 8,000 tons of chilled water capacity. One of its most powerful computers generates so much heat it operates while immersed in a nonconducting liquid called Fluorinert.

But beyond the gee-whiz factor lies an agency in need of reinvention.

Heir to America's World War II code-breaking heroics, the agency was created in secret by President Harry Truman in 1952. Signals intelligence—SIGINT, in spy parlance—has long been considered even more valuable than human intelligence or satellite imagery, because the quantity and quality of the potential take is so much greater. The NSA was intended to be the world's premier SIGINT agency, encoding American secret communications while stealing and decoding other nations'. Soon after its founding, the agency started growing into a juggernaut that would put listening posts around the globe, spy ships and submarines out to sea, and reconnaissance planes and satellites in the heavens.

The NSA rose to dominance in what were, in telecommunications terms, simpler times. Radio signals and microwaves were ripe for the taking as they bounced off the ionosphere or traveled straight out into space; to intercept them, one simply needed to get in their path. And the NSA did this better than anyone else, using everything from portable receivers that picked up vibrations off windowpanes to geosynchronous satellites 22,000 miles above Earth.

It was the NSA that first reported the presence of Soviet offensive missiles in Cuba in 1962. It was the NSA that first warned of the Tet offensive—five days before the attacks commenced across South Vietnam in January 1968. All told, the NSA broke the codes of 40 nations during the Cold War and, through an operation code-named Gamma Guppy, intercepted personal conversations of Soviet Premier Leonid Brezhnev. In 1986, President Ronald Reagan went so far as to bomb Col. Moammar Gaddafi's Tripoli headquarters after NSA intercepts revealed Libya's role in a terrorist attack on a Berlin discotheque that had killed two U.S. servicemen and a Turkish woman.

Making and breaking codes requires absolute secrecy, and the NSA took secrecy to extremes. Most Americans had never even heard of the agency for decades after it was established. In 1975, a Senate select committee headed by Sen. Frank Church revealed that the NSA had far exceeded the foreign intelligence mission envisioned by Truman and had been spying domestically on the likes of Jane Fonda, Joan Baez, Benjamin Spock and the Rev. Martin Luther King Jr.

The revelations led to laws and regulations that strictly prohibit the NSA from spying

on U.S. soil—laws and regulations, agency officials say, they now strictly follow. But the agency's cult of secrecy proved far more resilient. Even after the Church committee's revelations, it was a standing joke at Fort Meade that NSA stood for No Such Agency or Never Say Anything. In 1982, when author James Bamford was writing his groundbreaking first book about the agency, *The Puzzle Palace*, the Reagan administration threatened to prosecute him for espionage if he did not return sensitive documents he had obtained through the Freedom of Information Act. The administration ultimately backed down, but its treatment of Bamford was a sign of how secretive and arrogant the NSA had become. (By contrast, Hayden cooperated with Bamford on his second book about the NSA, *Body of Secrets*, which was published in May.)

The agency's high opinion of itself was backed up by its success throughout the Cold War, success that rested on three pillars: massive budgets, superior technology and the luxury of having a single main adversary—the Soviet Union—that enjoyed neither of those first two advantages.

Now, all those pillars have crumbled.

The NSA is still one of the largest employers in the state of Maryland, but it lost 30 percent of its budget and an equivalent slice of its workforce during the 1990s. And instead of one backward adversary, the agency found itself trying to deploy against elusive terrorist groups, drug cartels and rogue states, in addition to a full slate of traditional targets ranging from Russia to China to India to Pakistan. In 1980, the NSA focused about 60 percent of its budget on the Soviet Union. By 1993, less than 15 percent was fixed on Russia.

But if the end of the Cold War was hard on the NSA, the onset of the digital age was harder. More and more communications were moving through hard-to-tap fiber-optic cable. More and more were encoded with powerful new encryption software that was proving virtually impossible to break. By the late 1990s, NSA officials had given up a futile effort to limit the spread of encryption software, but they were left fearful of how their agency's capabilities could wither if, say, Microsoft started building powerful encryption algorithms into its operating systems.

More immediately, the NSA had to confront the exploding volume of global communications. In the 1950s, there were 5,000 computers in the world and not a single fax machine or cell phone. Today, there are more than 100 million hosts on the Internet serving hundreds of millions of networked computers, not to mention 650 million cell phones in use worldwide. And with broadband fiber-optic cable being laid around the world at the rate of hundreds of miles an hour (virtually the speed of sound), the speed for moving digital data down these slender pipes more than doubles annually—faster even than computing power, which doubles every year and a half.

With more and more digital data moving across the Internet and bouncing off communications satellites, SIGINT has become more important than ever. Yet the interceptible data stream has threatened to drown the NSA's analysts in a roiling sea of 1s and 0s.

In this new context, private industry suddenly controls the technology that the NSA needs to keep pace. But the NSA has been isolated from the dynamism of the market by its own cult of secrecy. The agency has fallen farther and farther behind, unable to

sort through a torrent of information streaming back into Fort Meade's computers and, to some extent, incapable of replacing its Cold War troops trained in radio intercepts and Russian with Internet engineers and Arabic speakers.

In 1999, the House Permanent Select Committee on Intelligence declared that the NSA was "in serious trouble," desperately short of capital and leadership. Civil libertarians, Internet privacy activities and encryption entrepreneurs—not to mention the European Parliament and thousands, perhaps millions, of ordinary Europeans—question the continuing need for such an agency, describing the NSA as an "extreme threat to the privacy of people all over the world," in the words of an American Civil Liberties Union Web site.

But the U.S. government considers SIGINT so essential that one senior intelligence official recently called the NSA's possible demise the greatest single threat to U.S. national security. So, three years ago, when the House and Senate intelligence committees began sounding the alarm, the director of central intelligence began an all-out search for somebody to fill the NSA's leadership void. George Tenet turned to a man who lacked the innate spookiness normally associated with this spookiest of agencies. A small man with a crew cut and a bald pate. A man with a scholarly interest in history. A man who would show no fear of either the public or the agency he would have to overhaul.

Michael Hayden, 56, grew up in an era when the backbone of America's industrial might comprised steel mills and factories, in a neighborhood on Pittsburgh's North Side where men carried lunch buckets to work and proudly traced their ancestors to County Galway.

His father, Harry Hayden Sr., was a welder at Allis-Chalmers, a plant that made giant electrical transformers. Harry worked the 3:30-to-midnight shift, leaving his wife, Sadie, to raise their three children almost by herself. But he remembers how, when he would awake before dawn and walk to the bathroom, the light would always be on in Michael's room at 5:30 in the morning. The boy was studying.

Michael was a standout student, and an athlete as well. "We never had to talk about Michael," says Harry, now 81. "Everybody else was."

As early as grade school, Michael showed a talent for impressing talent spotters. His football coach at the St. Peter's parochial schools says Hayden clearly had "the smarts" to play quarterback—no small judgment, coming as it does from Dan Rooney, son of the founding owner of the Pittsburgh Steelers and now the franchise's president. In time, however, Hayden distinguished himself most in the classroom, graduating near the top of his class at North Catholic High School and at Duquesne University, where he majored in history.

One day, he surprised his father by coming home from college and announcing that he had signed up for Air Force ROTC. It was 1967, when a lot of young men were burning their draft cards to protest the Vietnam War. "He wanted to travel, and I guess there wasn't a better way to do it," Harry says. Still, after graduating, Michael married his college sweetheart, a Chicagoan named Jeanine Carrier. She typed and proofread his master's thesis in American history at Duquesne while he drove a cab, worked as a night bellman at the Duquesne Club and coached St. Peter's to a football title.

Then he started his service in the Air Force, as an analyst and briefer at the headquarters of the Strategic Air Command at Offutt Air Force Base in Nebraska. Harry Hayden Jr. figures his older brother joined the service because he had read everything he could about American history and wanted to start participating.

A decade into his Air Force career, Michael held the rank of major and was chief of intelligence for a fighter wing at Osan Air Base in South Korea. The director of operations, Col. Chuck Link, a fighter pilot, detected the same leadership qualities Dan Rooney had recognized years earlier. So did Hayden's men. Gene Tighe, a young intelligence officer, remembers Hayden more as a mentor than a commanding officer. "He thought it was a great thing to be out and about and getting this opportunity overseas," Tighe recalls. "He wanted us to see the temples, the rice paddies, go shopping in Hong Kong. He took a vested interest in making you feel important."

After Osan, Hayden spent six months studying at the Armed Forces Staff College in Norfolk and 18 months learning Bulgarian before he became an Air Force attache to Sofia.

Two years later, he came home without a new assignment, but Link quickly recruited him to a job on a prestigious policy and planning staff inside Air Force headquarters at the Pentagon. Soon Link's boss, Gen. Chuck Boyd, the Air Force's director of plans, took notice of Hayden's ability to think conceptually and put his thoughts down on paper.

"He's got the soul of a historian, he really does," Boyd says. "He thinks things are explainable on the basis of how things have been. It's a scholarly bent, combined with an exceptional sensitivity to human behavior."

One day in the summer of 1989, Boyd told Hayden to go down to the National Security Council and see two men, an Air Force general and an arms-control expert. Hayden took the Metro across the river and reported to an office on the third floor of the Old Executive Office Building. Only then did he realize he'd been sent to a job interview.

He spent the next two years as the NSC's director for defense policy and arms control, where he wrote national security adviser Brent Scowcroft's annual policy document on strategy, then two more years at the Pentagon running a policy staff for the secretary of the Air Force. In 1993, Boyd, then commander of the U.S. European Command in Stuttgart, Germany, asked Hayden to head its intelligence directorate as the United States was becoming directly involved in the Balkans. From his attache days in Bulgaria, Hayden probably knew the region as well as anyone in the U.S. military.

On June 2, 1995, Hayden walked into the U.S. Embassy in Belgrade to learn that an American F-16 piloted by Air Force Capt. Scott O'Grady had been shot down over Bosnia. The news marked a turning point in Hayden's thinking as a soldier.

Serb Gen. Ratko Mladic had been saying publicly that he would deny Serb airspace to NATO. Operations officers at the European Command had dismissed the threat, but Hayden was familiar with Mladic and did not see him making idle threats. As an intelligence officer, he had informed the operational commanders of Mladic's statements and relayed his impression that the general was not to be trifled with. But he didn't believe it was his place to voice further objections—until after O'Grady was shot down.

"Maybe I [should] have picked up the phone and told the air commander, 'Every

time I see that orbit on your morning slides, I get nervous," Hayden says, "But I didn't."

The incident forced Hayden to see the obsolescence of the military's traditional hierarchy, in which intelligence was seen merely as a support function. Increasingly, Hayden realized, intelligence was becoming so essential to make use of and counter sophisticated weaponry that it had become as much of a weapon in its own right as any bomb or missile. "It was a kind of redefinition of self, as a professional," he says. "It's not about intelligence successes or failures; it's just successes or failures."

Hayden's next assignment, as commander of the Air Intelligence Agency at Kelly Air Force Base in San Antonio, gave him plenty of opportunity to further hone his thinking. Kelly is where the Air Force works on its plans for cyberwar—attacks designed to take down adversaries' computer networks. Hayden next served as deputy chief of staff for the United Nations Command and U.S. Forces Korea. To those inculcated in military culture, this move sent a message. He crossed the divide between the bookish world of intelligence into the front-line world of operations. In the words of one senior intelligence official, "Here you've got an intel weenie who the four-star operator recognized as something special."

Late in 1998, he was leading a military delegation negotiating with a group of North Korean generals at Panmunjon, where talks at that high a level had not taken place in seven years. He was in Seoul when Tenet, searching for a new NSA director, summoned him for an interview. They met at the Wye Plantation on Maryland's Eastern Shore, where Tenet was attending Arab-Israeli peace talks hosted by the Clinton administration. After a relaxed interview in which Tenet asked Hayden about his views on life and change, Hayden flew back to Korea with a clear signal from Tenet that the NSA job was his. Given the job's normal three-year term and his lack of SIGINT expertise, Hayden knew he'd been handed the most challenging assignment of his career. Still, he returned to Seoul in a celebratory mood. He took his wife to the movie theater at Yongsan Army Garrison, which was playing a new movie starring Will Smith, "Enemy of the State."

The film opens with a scene in which a rogue NSA official (played by Jon Voigt) assassinates an influential congressman (Jason Robards) who refuses to back a bill expanding the agency's power to spy on Americans. From there, the movie portrays the NSA as a lawless band of high-tech assassins who try their best to kill a Washington lawyer (Smith) who just happens to witness another NSA assassination on streets around Dupont Circle.

As Hayden watched, surrounded by GIs whooping it up in the theater, he sank lower and lower in his chair.

In real life, the NSA's image problems were a bit more complicated.

In 1997, the European Parliament had commissioned a report on Echelon, a global communications system. That report had concluded that the NSA was capable of intercepting every fax, phone call and e-mail in Europe. The conclusion was wrong—Echelon is actually a relatively small system through which the NSA and its electronic spy partners in the United Kingdom, Canada, Australia and New Zealand divide responsibility for processing intercepted satellite communications—but it did not matter. The European Parliament's anxieties flared into a controversy that wouldn't go away, fueled by

the lawmakers' suspicions that the NSA was stealing European companies' secrets and passing them on to their American competitors, a practice NSA officials say they do not engage in.

Beyond industrial espionage, the Europeans also worried about individual privacy, because the U.S. laws and regulations that keep the NSA from spying on Americans provide no similar protections for foreigners. By 1999, this controversy had attracted the attention of civil libertarians in the United States who were concerned about possible NSA spying against Americans on the Internet, which the agency is prohibited by law from doing.

While all this was brewing, the agency's boosters on Capitol Hill were becoming alarmed that the NSA was in serious trouble because of new communications technologies—fiber-optic cables that couldn't be tapped, encryption software that couldn't be broken and cell phone traffic too voluminous to be processed.

Hayden was keenly aware of the irony: He was inheriting an agency that was simultaneously being accused of omnipotence and incompetence. And then, almost as soon as he arrived at Fort Meade, Hayden discovered another wrinkle: The NSA director didn't really run the agency. The agency, Hayden soon came to understand, had been diffused into five directorates that ran as fiefdoms unto themselves. The bureaucratic overlap was staggering, and no one had a picture of the whole. There were 68 different e-mail systems at Fort Meade, and 452 internal review boards of one sort or another.

It wasn't as though the bureaucracy was actively trying to sabotage him—"that would have required them to unify," Hayden says. Rather, he couldn't get the senior leadership to agree on anything, "from whether or not we should invest \$2 billion in a new collection system to whether we should serve grilled cheese" to visiting delegations.

Early in his tenure, Hayden began plotting an internal coup, naming two review teams—one made up of NSA insiders, the other private-sector experts—to tell him what was wrong with the agency. The results were startling.

The insiders' report blasted Hayden's predecessors and the NSA's senior civilian managers, saying the agency "has been in a leadership crisis for the better part of a decade . . . the legacy of exceptional service to the nation that is NSA is in great peril. We have run out of time."

The outsiders cited the agency's "reluctance" to move from "legacy targets to newer targets" and said that NSA had already become "deaf" to concerns from its customers—military commanders, White House policymakers and the CIA. "Right now, when stakeholders tell NSA that 'NSA doesn't get it,' the agency simply repeats itself and talks louder," their report said.

But Hayden remained cautious, painfully aware that he was no expert in signals intelligence. He thought he saw what needed to be done but didn't feel sure, especially when many of his senior managers who were SIGINT experts were reluctant to move.

Then the computers crashed in January 2000, confirming his worst fears about the agency's antiquated technology and its leaden bureaucracy.

With the snow outside headquarters still being cleared, Hayden strode off the stage in Friedman Auditorium. His challenge—This does not leave the building—was still ringing in everyone's ears. In a room off the agency's operations center, he called all of the agen-

cy's top technicians and engineers together and told them just how serious the meltdown had become. Tenet was still giving them plenty of room to fashion a solution, Hayden said, but pressure was building "downtown."

Hayden has no trouble remembering the day's event. That Thursday happened to be his 32nd wedding anniversary. That night, with the system showing some signs of life, he took Jeannie to an inn west of Frederick called Stone Manor for dinner. On the drive home, Robert Stevens, the NSA's deputy director for technology, called to say that he needed to talk to Hayden "secure." Hayden called him back on a secure line as soon as he got home.

The system had been dysfunctional for more than 72 hours. It was back up to about 25 percent capacity, Stevens said, but he didn't think the techies were on the right path. He wanted permission to take the entire system down and start all over again.

By then, a team of NSA engineers and contractors had pinpointed an outdated routing protocol as the cause of the failure. With the system completely shut down, they began installing a massive hardware and software upgrade. And by Friday morning, the system was coming back to life, node by node. Deeply relieved, Tenet drove over to Fort Meade that night and personally shook the hands of dozens of disheveled, unshaven techies, many of whom hadn't been home since Monday.

Hayden, feeling much better about life the following afternoon, went cross-country skiing with his wife on the Fort Meade gold course. Soon, he noticed that he was being shadowed by an NSA patrol car. Trudging through the snow, an officer asked Hayden to take off his skis and come with him back to the operations center. George Tenet needed to talk to him—ABC News had the story.

Tenet told Hayden to talk to the reporter, John McWethy, on the record so he would get the story right. Hayden said fine. He knew McWethy, and knew where he was based—the Pentagon. The leak had come from there, not Fort Meade. "You held the line," Hayden later told his own people. "You kept it secret while it had to be secret."

But with Hayden's relief came a realization about the larger task ahead: The price he would pay for moving too cautiously would greatly exceed whatever he would pay for being too bold.

He would be bold.

Hayden's internal coup began with an innocuous act: He hired a chief financial officer. Without one, he had no way of making strategic decisions based on how much money was being spent across the entire agency on line items like research and development, information technology and security. So Hayden hired Beverly L. Wright, a Wellesley College graduate with an MBA from the Harvard Business School and a solid reputation as CFO at the old Baltimore investment bank of Alex. Brown.

For an agency that had always promoted its own and promised lifetime employment, hiring from the outside was a radical act.

Then Hayden did it again, hiring a former GTE telecommunications executive named Harold C. Smith to take control of the agency's information technology. In doing so, he wanted to extend a powerful metaphor he'd drawn from his experience in the Air Force. He had come to see the service as the military expression of the American aviation industry and American culture—its dynamism, its risk taking, its proud individualism. He believed that the NSA had to become the intelligence expression of American technology and American culture. It needed to



embrace the innovative, flexible, entrepreneurial spirit that had come to define the digital age. "We can no longer provide to America what we need to do so isolated from America," he says. "To end the isolation, America needs to know us better."

And so, as his housecleaning began, Hayden also launched an openness campaign, appearing in April 2000 at a rare public session of the House Permanent Select Committee on Intelligence. With the European Parliament continuing its Echelon investigation and the American Civil Liberties Union voicing similar concerns, Hayden told the committee that NSA employees took great care "to make sure that we are always on the correct side of the Fourth Amendment."

"Let me put a fine point on this," Hayden testified. "If, as we are speaking here this afternoon, Osama bin Laden is walking across the bridge from Niagara Falls, Ontario, to Niagra Falls, New York, as he gets to the New York side, he is an American person. And my agency must respect his rights against unreasonable search and seizure."

Rep. Heather Wilson (R-N.M.) pressed Hayden on this point. "Does NSA spy on the lawful activities of Americans?" she asked.

"No. The answer is we do not," Hayden said.

"Do you inadvertently collect information on U.S. citizens?" asked Rep. Tim Roemer (D-Ind.).

Yes, Hayden replied. But, he said, "if it is not necessary to understand the foreign intelligence value of the information collected, it is not reported, it is destroyed. And it is destroyed as quickly as we can do that."

Back at Fort Meade, Hayden's grand plan for rebuilding the agency for the digital age was slowed by his inability to pick a deputy. He had departed from tradition again, appointing a search committee instead of simply anointing one of the bureaucracy's nominees. He was intrigued by the notion of picking an outsider, even though retired Adm. Bobby Ray Inman, a legendary past NSA director whom Hayden frequently called for advice, strongly objected. "What I thought he couldn't do was go to somebody who didn't know the business," Inman recalls. "The learning curve is too long, and you'd get waited out."

Ultimately, Hayden resolved the conflict by picking an insider who had worked as an outsider. William B. Black had spent 38 years running some of the agency's spookiest operations before retiring in 1997 and going to work for Science Applications International Corp. He was, by training, yet another Russian linguist. But Black had served a tour as chief of an elite unit focused on Russian communications. More important, he had run the Special Collection Service, the joint NSA-CIA operation that works out of foreign embassies and fuses the talents of human spies and ultra-tech eavesdroppers to get very close to particularly difficult targets. Most telling was Black's final NSA assignment: special assistance to the director for information warfare. In that role, he had established the government's preeminent cyberwarfare unit—and alienated so many NSA bureaucrats by poaching on their cherished turf that resignation was his only viable option.

Hayden liked Black's expertise and his reputation as an iconoclast. In July 2000, he invited Black to his house for dinner. Over couscous and roasted vegetables the director had prepared himself, Hayden made it clear that he wanted a deputy who could help change the system, not end-run it. Black's one-word answer—"Exactly"—convinced Hayden that he had his deputy.

With Black onboard, Hayden was ready to move. Last October, he rolled out his reorganization plan, wresting control of the agency from its own bureaucracy. All the NSA's support services would be centralized under Hayden's chief of staff. And where there were five overlapping directorates, Hayden would have just two: one for information security (the agency's codemakers) and another for signals intelligence (its codebreakers).

Now, he hoped, senior managers could focus on going after bytes.

A decade ago, a single NSA collection system could field a million inputs per half-hour. Automated filtering systems would winnow that to 10 messages that needed review by analysts. With today's explosion in communications traffic, multiply a million inputs per half-hour by a 1,000 or 10,000, and 10 messages needing review becomes 10,000 or 100,000. Cutting-edge fiber-optic systems now move data at 2.5 to 20 gigabits per second. The latest Intelsat satellites can process the equivalent of 90,000 simultaneous telephone calls. A single OC3 line on the Internet transmits 155 million bits per second—the equivalent of 18,000 books a minute.

From an operational standpoint, the NSA's Cold War vacuum-cleaner approach is no longer tenable—there's just too much to be collected, and it's too hard to process. The only way for the NSA to remain relevant in this environment is to target the individuals and organizations whose communications are most valuable—and targeting now is more complicated than programming a target's telephone number into a computer. To succeed in the digital age, NSA analysts must understand how a target communicates, what its Internet protocol addresses are, and how its traffic is routed around the world.

And with so many conceivable targets in the world, the only way to zero in on the most important ones is to ask White House officials, Pentagon commanders and CIA officers to identify the targets they're interested in. The days when NSA officials sent the White House whatever interested them are over.

Now, SIGINT requires the agility to move from system to system and adapt to new technologies. If that can be done, the potential for electronic spying is enormous. Sophisticated Internet surveillance techniques now make it possible to acquire data "in motion" across the network—and data "at rest" in computer databases, the new frontier.

"The world has never been more wired together than it is today," says Stewart Baker, who served as the NSA's general counsel from 1992 to 1994. "It's the golden age of espionage. Stealing secrets is going to get even easier for people who employ technologically advanced tools and are willing to work aggressively at it."

Even so, the challenges are formidable. The NSA is known to be hard at work trying to gain access to fiber-optic cables. How it is doing is not publicly known. One means would be tapping undersea cables or placing interception pods over "repeaters" that periodically boost fiber-optic signals. But even if the lines can be tapped, transmitting the torrent of intercepted data from the depths of the ocean to Fort Meade in anything close to real time would be far harder still, possibly requiring the NSA to lay its own fiber-optic lines from the tap to some sort of relay station.

The most recent European Parliament report on Echelon concluded that such links would be far too costly. The report also said that new laser regenerators used to amplify

fiber-optic signals cannot be tapped the way repeaters can, meaning that "the use of submarines for the routine surveillance of international telephone traffic can be ruled out."

The Navy's decision to spend \$1 billion to retrofit its premier spy submarine, the USS Jimmy Carter, would suggest American policymakers believe otherwise.

Another challenge facing Hayden's NSA is to decode communications encrypted with powerful—and widely available—software. When Hayden became director, the deputy he inherited told Congress that the encryption software would make the job of decoding encrypted messages "difficult, if not impossible," even with the world's largest collection of supercomputers.

One alternative is to steal 1s and 0s before they are encrypted, or after they are decrypted. This requires classic espionage—as practiced by the Special Collection Service, the top-secret joint CIA-NSA operation. In the Code War, American spies recruited Soviet code clerks. Now the targets of choice—the people paid to sell out their governments or organizations—are systems administrators and other techies capable of providing encryption keys or planting electronic "trapdoors" in computer systems that can be accessed from computers on the other side of the world.

The irony amid all this new technology is that human beings—old fashioned spies—are suddenly as important as ever.

With his organization laid out and his mission clarified, Hayden began updating his human resources last December. He freed up enough slots and cajoled additional funds from Congress to hire 600 people this year—three times what the agency had been hiring annually. Sixty senior managers accepted early retirement incentives, giving him enough headroom to reach down a generation in selecting new managers. Maureen A. Baginski, a member of the insiders team that produced the scathing management assessment for Hayden back in 1999, headed the class.

She would run the newly created directorate of signals intelligence. Now, an operations officer targeting a terrorist cell could team with an engineer who could help him figure out how the cell's communications were routed around the world. And though Baginski, too, is a former Russian linguist, she clearly understood the challenges ahead. "You could literally stare for 25 years at the Soviet land mass and never have this kind of volume problem," she says. "They were slow, so it was okay if we were slow. Today, it's volume, it's velocity and it's variety."

Her management style, too, is more current—more attuned to the idea of empowering the people beneath her. When a U.S. Navy EP-3 reconnaissance aircraft—an NSA asset—crash-landed on China's Hainan Island this spring after colliding with a Chinese fighter jet, an operations officer called Baginski at home late on a Saturday night, told her what had happened and said, "You will want to come in."

Baginski replied: "No, I will not want to come in." Her reasoning was that the agency already had a person charged with running an emergency response operation. "Why should I do it in a crisis if someone else does it every day?" Baginski said.

As Baginski was settling in, Hayden was busy looking outside the NSA for new people to work for her—and soon found the agency swamped. In February, the home of No Such Agency and Never Say Anything held a job fair to recruit computer scientists, mathematicians, linguists and analyst to become



new spooks. Seventeen hundred people registered in advance—and hundreds of walk-ins dressed in dark business attire showed up and waited in a line that snaked through the parking lot. Hayden's openness initiative was paying dividends.

Soon, he advertised in the outside world to fill eight other top jobs, including chief information officer, chief of legislative affairs, deputy associate director for research and chief of SIGINT systems engineering. All of the jobs paid between \$109,000 and \$125,000, well below salaries for commensurate jobs in the private sector. But, as Black is fond of saying, "patriotism still works on occasion."

By the end of March, the NSA began its first major push to involve the private sector in development of new SIGINT technology with an initiative it called Trailblazer. A total of three contracts, worth about \$10 million apiece, were awarded to corporate consortia led by Booz Allen & Hamilton Inc., Lockheed Martin Corp. and TRW's systems and information technology group.

Skeptics wonder whether it will all be enough, given the speed with which technology is moving. They also question whether there is enough top technical talent still left at the NSA to manage complex relationships with contractors so that the contracts result in real gains instead of white elephants. The Federal Aviation Administration, after all, hired IBM in the late 1980s to design a new air traffic control system—and ended up abandoning the project at a cost of \$500 million.

But analysts on Capitol Hill and other close observers in the private sector say Hayden, Black, Baginski and company appear to be getting their message across that the NSA must take risks if it is ever to "own the virtual," as one industry analyst put it.

James Adams, a British journalist turned Internet security executive who serves on a panel of outside advisers created by Hayden, says the agency's workforce breaks down into three distinct camps: 25 percent are enthusiastic about Hayden's program, 25 percent are threatened and dead set against it, and 50 percent are sitting on the fence waiting to see who wins.

Sometime this summer, Hayden plans to publish reduction-in-force procedures to deal with the naysayers, if need be. He will keep offering retirement incentives, preferring the carrot to the stick, but now accepts that layoffs may be necessary.

They would be the first in the agency's history.

With all the changes, Hayden may be making enemies among his agency's old guard, but he's also building a powerful constituency elsewhere. "We went deaf for 72 hours because of an antiquated system that should have been upgraded years ago," says Tim Sample, staff director of the House Permanent Select Committee on Intelligence. "When you're at that point in an organization, it takes a monumental effort over a sustained period to get back up to speed. They needed a leader—and that's what they got."

Sample's boss, Rep. Porter J. Goss (R-Fla.), the committee's chairman, recently floated the idea of promoting Hayden to a four-star general and extending his three-year tour, now less than a year from completion.

Tenet has gone even further. "My personal view is, Mike Hayden must stay out there for five years—he has got to have time on target," Tenet says. "He's thinking out of the box. He's engaged. He's not afraid of opening up the NSA. He's not afraid of the American public. And he knows what has to be done."

Hayden is willing to stay on, if that's what Tenet and Defense Secretary Donald Rumsfeld desire. There is, he knows, much work still to be done. His personal focus this summer—now that the computers seem to be working again—is people. Specifically, promotions. Six months ago, Hayden got rid of all regulations requiring employees to spend two years at one pay grade before they get promoted to the next. Now he's trying to make sure that the agency's hidebound promotions panels start taking advantage of that freedom. If the right people don't advance, Hayden believes, nothing else really matters.

He says he feels more and more confident about the course he's charted. But there's a certain fatigue in his voice. "I feel tired," Hayden allows. "But I see points of light more frequently."

Mr. GRAHAM. Madam President, with a prayer that God will be with us as we enter this next and more challenging period of our Nation's history, I extend the wish that God will bless our Nation and that we will be worthy of his blessings.

Thank you.

The PRESIDING OFFICER. Under a previous order, the Senator from Maine, Ms. COLLINS, is recognized to speak for up to 5 minutes.

Ms. COLLINS. Madam President, it is very difficult to wrap one's mind around the terrible tragedy that our Nation has suffered. It is still harder to comprehend what must have been in the hearts and minds of people willing to commit such atrocities against their fellow human beings. It is very difficult to even find the right words to speak about the attack on America.

But speaking about it is something we must do. The American people and the Government of the United States of America must speak forcefully and with crystalline clarity. The families and friends of those killed or wounded in these awful terrorist attacks must know that the prayers of every American and of millions upon millions of people around the world are with them now.

The heroic firefighters, police officers, rescue workers, National Guardsmen, doctors, nurses, members of the clergy, and the citizens who are volunteering, who are even now struggling to save the lives of the surviving victims and to help grieving families, must know that our hearts and our deepest gratitude are with them in their vital work.

Our Commander in Chief and all the men and women of the Armed Forces, our law enforcement community, and our intelligence agencies must know that we stand behind them, as perhaps never before in my lifetime, as they set about with grim resolution to ensure that justice is done to those responsible.

And the evil people who planned and committed these atrocities—and all of those who may have aided and abetted them—must know that far from paralyzing the American people and divid-

ing us fearfully against one another, what they have done instead is instantly to unite all of us into one people. We stand united in the solidarity of grief and commitment to our fellow citizens and utterly single minded in our determination to remain unbowed and to see justice done.

In fact, this is my fifth year in the Senate, and never have I seen the Senate more united and more determined than we are now.

These, then, are the messages we must send—and that we must keep sending with relentless determination. America may have lost a measure of our innocence, a degree of that special separateness that has helped us to keep our land of liberty safe from some of the storms that have long battered other peoples in an often turbulent world; we clearly are not as separate or as safe as once we thought. But no one—no one—should doubt our resolve and our resilience. It is in moments such as these that the special character of America can and should shine through with particular brilliance. It shines through in our sacrifices in helping fellow citizens in terribly trying times. It shines through in the sacrifices of those brave and heroic passengers who were on the jet that did not make it to the intended target. It shines through in our commitment, even in adversity, to the bedrock values that make our system of government worth protecting, even as those values draw the murderous ire of twisted souls whose only answer to the discourse of liberty is a vocabulary of violence, terror, and death.

As we care for survivors and comfort those who have lost loved ones, we also will set about finding those responsible. We must respond to these horrors in a way befitting our voices as free and united people. But let there be no doubt, respond we should and respond we will.

As difficult as it is to find a voice to talk about the horrors we have experienced, I believe by finding our voices amid such shock, rage, and pain we reaffirm our most cherished principles as citizens of the United States of America.

With God's help, we shall persevere, we shall find comfort in our grief, we shall find strength in the days ahead, and we shall hold those responsible for these attacks on America responsible for their actions.

Madam President, seeing no one seeking recognition, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. REID. Madam President, I ask unanimous consent the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.